Opposing Views Attachment #14

Dead and Dying Trees are Important to the Survival of many Natural Resources in the Forest and should not be Removed to Provide Opportunities for Corporate Profit or to Produce Private Industrial Tree-Farm Conditions

<u>Dead Trees Opposing View #1 -</u> "Intensified forest management, responding to the ever-increasing demand for forest products, will have a strong influence on the amount and distribution of woody material that remains as wildlife habitat through present and future stand rotations. Leaving the perpetuation of large down material to chance will probably result in its disappearance from the managed forests of the future, along with the loss of dependent plant and wildlife species."

Bartels, Ronald, John D. Dell, Richard L. Knight Ph.D. and Gail Schaefer "Dead and Down Woody Material"

Animal Inn

http://www.fs.fed.us/r6/nr/wildlife/animalinn/hab 8ddwm.htm

<u>Dead Trees Opposing View #2 -</u> "Wuerthner has long argued that dead trees are critical to a healthy forest ecosystem and don't necessarily need to be removed from a forest to lessen the danger of catastrophic wildfires."

"Wuerthner said logging as a preventive measure might slow down the infestation, but research shows that anywhere from 50 to 80 percent of the trees need to be removed if conditions are ripe for a major attack.

"So you have to ask yourself, what's the point? That is the Vietnam approach to forestry — kill all the trees so you can 'save' them," Wuerthner wrote, adding that logging isn't benign and is expensive. "So you further have to ask whether the costs in terms of ecosystem impacts (the spread of weeds on logging roads for instance) are worth the presumed benefits." "

Byron, Eve "Wuerthner to speak on forest ecology and value of dead trees" Published in the Helena *Independent Record*, November 17, 2009 http://www.helenair.com/news/local/article_7cac58d2-d339-11de-abfc-001cc4c002e0.html

<u>Dead Trees Opposing View #3 -</u> "When many of us think of a healthy forest, we think of tall, green trees. It's hard to imagine how a tree killed by mountain pine beetle could be good for a forest. However, to be truly healthy and support all the wildlife that depends on it, there must be a variety of young, old and dead trees in a forest ecosystem. At "endemic" or normal levels, mountain pine beetles help maintain this diversity by colonizing and killing old or damaged trees, therefore kick-starting the invaluable process of decomposition. Decomposing wood returns nutrients to the system while providing shelter and food for many plants and animals. Standing dead trees host a diversity of organisms that would not be present without them."

"Dead Trees are Good Homes"

Parks Canada, 2009

http://www.pc.gc.ca/eng/docs/v-g/dpp-mpb/sec1/dpp-mpb1b.aspx

<u>Dead Trees Opposing View #4 -</u> "Things are not always what they seem. At first glance a dead or dying tree seems like a tragic loss of a valuable resource. But on further inspection it becomes clear that a dead tree is simply a part of nature. And as a part of nature it serves an important purpose that isn't always obvious to us.

Dead trees and dead parts of trees are critically important to birds and mammals for nesting, rearing of young, feeding and as shelter. With a little forethought and tolerance we can maintain our organized, structured lifestyle and at the same time provide wildlife the habitat it needs to survive. In the long run, we'll be the better for it."

Kreil, Randy "Bare Trees"

North Dakota Outdoors, March 1994

http://www.und.nodak.edu/org/ndwild/oldtree.html

<u>Dead Trees Opposing View #5 -</u> "The forest floor is a living, breathing factory of life and death. The out-reaching roots of a great tree search out from that chemical stew we call soil not only moisture but those elements it needs while its solar panels, or leaves, exchange carbon dioxide and oxygen.

Years later, when this aged giant completes its cycle and falls, crashing to earth, those very organisms and creatures which sustained it in life will gradually disassemble its biomass, returning to the soil those molecules which the next generation of seedlings, already sprouting, require for sustenance."

"Forest biologists such as Herbert Kronzucker, Ph.D., point out that dead and dying trees sustain the coming generations, are not a hazard, and are essential to the health of the forest." Alaskan fire management official John LeClair has noted that dead trees left standing, rather than increasing the hazard of fires, burned more slowly, retarding the conflagration in contrast to the "explosive inferno" when a live tree full of inflammable resins caught fire."

Miller, Edward W. "Savage or Salvage Logging?" The Coastal Post - September, 1998 http://www.coastalpost.com/98/9/13.htm

<u>Dead Trees Opposing View #6 -</u> "Dead and down woody materials have long been viewed by foresters as unsalvaged mortality, the utilization of which is an important objective of good timber management. This material

is also viewed as a fire hazard, and steps are frequently taken to reduce the amount of flashy fuels from timber harvest areas. Woody materials are also recognized as home for small vertebrate animals that are considered "pests" which impede reforestation.

These are all valid considerations, but dead and down woody material in various stages of decay serves many important functions, one of which is habitat for wildlife. Instead of viewing logs left in a forest as unsalvaged mortality or a fire hazard, this chapter examines their role as wildlife habitat. Elton (1966, p. 279) put it this way:

When one walks through the rather dull and tidy woodlands--say in the managed portions of the New Forest in Hampshire [England]-that result from modern forestry practices, it is difficult to believe that dying and dead wood provides one of the two or three greatest resources for animal species in a natural forest, and that if fallen timber and slightly decayed trees are removed the whole system is gravely impoverished of perhaps more than a fifth of its fauna."

Maser, Chris Ralph G. Anderson, Kermit Cromack, Jr. Ph.D.
Jerry T. Williams and Robert E. Martin, Ph.D. "**Dead and Down Woody Material**"
From Wildlife Habitats in Managed Forests the Blue Mountains of Oregon and Washington

http://www.fs.fed.us/r6/nr/wildlife/animalinn/hab_6ddwm.htm

<u>Dead Trees Opposing View #7 -</u> "Cavity trees are dead or dying trees that contain one or more holes or cavities that could be used by wildlife for a variety of purposes — nesting and raising young, denning, roosting, resting, feeding, caching food, escaping predators and hibernating."

"The majority of wildlife species that use cavities cannot excavate their own holes and rely on those created by primary cavity users or on holes that form naturally. This group is called secondary cavity users. The kestrel, some owls such as the saw-whet and barred owls, ducks such as the common goldeneye and wood duck, and songbirds like the eastern bluebird, great-crested flycatcher and white-breasted nuthatch are all secondary cavity users. Many mammals are in this category too. These

include deer mice, red squirrels, grey squirrels, flying squirrels, weasels, martens, fishers, raccoons, porcupines and black bears."

Naylor, Brian, Ph.D. "Cavity Trees – Nature's Refuge"

The Ontario Woodlot Association Newsletter, Winter / Spring 2006, Vol. 42

http://www.ontariowoodlot.com/pages_pdf new/cavitytree S&W.pdf

<u>Dead Trees Opposing View #8 -</u> "Dead wood and dead trees provide essential habitat for a wide variety of native animals and are important to the functioning of many ecosystems. The removal of dead wood can have a range of environmental consequences, including the loss of habitat (as they often contain hollows used for shelter by animals), disruption of ecosystem process and soil erosion."

"Removal of dead old trees (either standing or on the ground) results in the loss of important habitat such as hollows and decaying wood (Gibbons & Lindenmayer 2002) for a wide variety of vertebrates, invertebrates and microbial species and may adversely affect the following threatened species: Broad-headed Snake, Orange-bellied Parrot, Regent Parrot (eastern subspecies), Five-clawed Worm-skink, *Nurus atlas*, *Nurus brevis*, *Meridolum corneovirens*, Pale-headed Snake, Stephens' Banded Snake, Rosenberg's Goanna, Pink Cockatoo, Red-tailed Black-cockatoo, Glossy Black-cockatoo, Turquoise Parrot, Scarlet-chested Parrot, Barking Owl, Superb Parrot, Masked Owl, Hoary Wattled Bat, Spotted-tailed Quoll, Eastern False Pipistrelle, Eastern Freetail-bat, Squirrel Glider, Brush-tailed Phascogale, Glandular Frog, Red-crowned Toadlet, Brown Treecreeper (eastern subspecies)."

"Removal of dead wood and dead trees was listed as a KEY THREATENING PROCESS"

Schedule 3 of the *Threatened Species Conservation Act 1995* [12 December 2003]. http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/threat_profile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx?id=2">http://www.threatenedspecies.environment.nsw.gov.au/tsprofile.aspx.gov.au/tsprofile.aspx.gov.au/tsprofile.aspx.gov.au/tsprofile.aspx.gov.au/tsprofile.aspx.gov.au/tsprofile.aspx.gov.au/tsprofile.aspx.gov.au/tsprofile.aspx.gov.au/

<u>Dead Trees Opposing View #9 -</u> "Birds are the most obvious benefactors of dead trees. They use snags, limbs, and logs for perching, foraging, and nesting. In some forests, 30 to 45 percent of the bird species are cavity nesters. In North America alone, 55 avian species nest in cavities. Cavitynesting birds are classified as *primary excavators* (who can excavate hard wood), weak excavators (who can excavate soft, dead wood), or secondary cavity-users (who can utilize existing cavities). In Ohio, eastern bluebirds, American kestrels, and wood ducks are examples of species that rely on cavities in dead wood for successful reproduction. Other birds, such as ruffed grouse, will use logs for drumming and courtship displays.

However, birds are not the only creatures that benefit from dead wood. Mammals, amphibians, reptiles, and invertebrates seek refuge in natural cavities and dens. For example, salamanders rely on the security and dampness of soil found beneath a rotting log. Small mammals find cover and relief from the hot midday sun in dead limbs and downed wood, while spiders, beetles, worms, and microbes move and feed within the decaying matter. Additionally, fungi and mushrooms flourish on and around logs, breaking down the organic matter to release important nutrients back into the forest ecosystem.

Logs provide other important ecological functions as well. Decaying logs retain moisture and nutrients that aid in new plant growth. Young trees may sprout from a single downed limb known as a *nurse log*. The soft wood tissue of a nurse log offers an ideal substrate for many young trees during their initial growth and development. Logs also store energy and fix nitrogen. Furthermore, dead wood serves as a ground cover, lessening soil erosion and preventing animals such as deer from over-browsing plant seedlings."

Santiago, Melissa J. and Amanda D. Rodewald, Ph.D. "Dead Trees as Resources for Forest Wildlife"
Ohio State University Extension Fact Sheet http://ohioline.osu.edu/w-fact/0018.html

<u>Dead Trees Opposing View #10 - "Wildlife trees (dead or dying trees used</u> for nesting, feeding, denning and roosting) go through several stages that

can start with ants tunneling into the rotting centre to flycatchers perching on the bare branches. For cavity-nesting birds they are critical habitat. Some species excavate cavities for their nests, while others take over and enlarge existing holes. Many of these birds in turn help the forest, eating insects which can damage trees."

Schneider, Gary, "Dead Trees (they're still full of life)"
The Macphail Woods Ecological Forestry Project, December 2008
http://www.macphailwoods.org/wildlife/deadtrees.html

<u>Dead Trees Opposing View #11 -</u> "Twenty years after publication of a report on wildlife habitat in managed east-side forests, Pacific Northwest Research Station scientists Evelyn Bull, Catherine Parks, and Torolf Torgersen, are updating that report and discovering that the current direction for providing wildlife habitat on public forest lands does not reflect findings from research since 1979. More snags and dead wood structures are required for foraging, denning, nesting, and roosting than previously thought. In this issue of *Science Findings*, Bull, Parks, and Torgersen, share their latest findings, which include the fact that snags and logs are colonized by organisms representing a broader array of plants, invertebrates, and vertebrates than was previously recognized."

Science Findings, issue twenty, November 1999 Pacific Northwest Research Station USDA Forest Service http://www.fs.fed.us/pnw/sciencef/scifi20.pdf